## **Listing of Claims:**

- 1.-8. (Canceled)
- 9. (Original) A method for optimizing the operation of the recausticizing cycle in a pulp mill, comprising the steps of:
  - withdrawing from the pulp mill recausticizing cycle a mixture containing particulate calcium carbonate;
  - injecting an effective amount of a fresh calcium containing compound selected from the group consisting of calcium oxide and calcium carbonate, into the recausticizing cycle to replace the withdrawn mixture;
  - treating the withdrawn mixture to substantially remove contaminants in the mixture to produce a treated calcium carbonate mixture; and recovering from the treated calcium carbonate mixture a particulate calcium carbonate having an average particle size less than about 12 microns.

10.-13. (Canceled)